THE DYNAMICS OF TRADE AND ECONOMIC RELATIONS IN SOUTHERN AFRICA: CURRENT STATUS AND OPTIONS FOR THE FUTURE*

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I. Introduction

The aim of this paper is to discuss economic and trade relations in Southern Africa, both the current status and options for the future. The region considered covers eleven countries, namely, Zimbabwe, Zambia, Botswana, Lesotho, Tanzania, Angola, Mozambique, Malawi, South Africa, Namibia, and Swaziland. The analysis will cover both trade in commodities and labor. Trade in labor, as a factor of production, will be analyzed between South Africa and the rest of the countries. The implications on both commodity and factor trade are analyzed in a post-apartheid South Africa. Special attention is also given to relations pertaining to the transport, energy sector, financial sector and capital markets development in the region. We should put it clear at this stage that one broad objective is to analyze how and why the relations among countries will change when the situation in the powerful South African economy normalizes. The paper proposes that SADCC would have to be to substituted by a larger region organization that includes South Africa and Namibia. This new organisation we refer to as the Southern Africa Common Market Area (SACMA). The increasing organization of the world into trading blocs is one compelling raison detre for a new regional organization. The paper also discusses the main impediments to regional trade and proposes policies for trade improvements.

The rest of this paper is organized as follows. Section II compares and contrasts the different economies in Southern Africa and Section III looks into the trade issues. In Section IV we shall discuss the trade flows among the countries, noting the most active trade linkages. Trade in factors of production in the form of migrant laborers in South Africa is considered in Section V. The current and future state of the transport and communication sector receives attention in Section VI, while regional energy policies are discussed in Section VII. Policy issues for improving regional trade in Southern Africa are analyzed in Section VIII, and Section IX is the conclusion.

II. Economies of Southern Africa[1]

Southern African countries cover an area that is about 6 million km^2, and their combined gross domestic product was US$92,535 million in 1988, excluding Angola. With a gross population of 98.2 million people, the region has a GDP per capita of US$942.8 per annum. South Africa's dominance in the region is revealed by its GDP of US$74,136 million, which is about 80 percent of the regions GDP. Table 1 below shows the countries' main economic variables. The other nine countries' GDP is only about 25 percent of South Africa's GDP, meaning that the country's level of economic activity as measured by the GDP is four times larger than that of its nine neighbors.

Even with the largest population in the region of 33 million people, its GDP per capita is still the highest at US$2,246.2 per annum. Zimbabwe, whose GDP is only about 8 percent and 6 percent of South Africa's GDP and regional GDP, respectively, has the second largest GDP of US$5,598 million. The gap between the first two countries is astounding. This says something about South Africa's immense endowments with natural mineral resources and a larger population, which is one third of the region's population and provides a larger domestic market.

With a GDP level of US$ 2,735 million , nearly half that of Zimbabwe, Zambia comes third. This is a country rich with one mineral resource, copper. Its dependence on this one resource has left the country susceptible to volatility in the copper market. Botswana follows closely to Zambia, with a GDP of US$2,577 million and Tanzania follows closely too with a GDP level of US$2,492 million.

Namibia, which got its independence from South Africa in 1989, after 60 years of South African rule, follows Tanzania with a GDP of US$1554 million. Namibias's GDP is about 2 percent of that of South Africa, even though its area size is three-quarters of South Africa. Thereafter the sequence is Malawi (US$1,401 million), Mozambique (US$1,052 million), Swaziland (US$582 million) and Lesotho (US$408 million). Lesotho, the smallest country, contributes about 0.5 percent to regional GDP, and is about 0.6 percent of South African GDP. The gap is very wide.

As an indicator for potential income distribution the table above shows the GDP per capita. The advantage of having a small population, but a richly endowed economy with

[1] Data on Angola has been difficult to obtain, and our discussion will thus exclude it.

natural resources, is easily reflected by the GDP per capita. In this respect, Botswana which is number four in GDP size, is number two after South Africa, in GDP per capita with a GDP per capita of US$2,147.5. With a population 1.2 million people and large diamond reserves, this is easy to explain. This characteristic also extends to Namibia which lies in third place with a GDP per capita of US$1,195.4. Both Botswana and Namibia are large countries with deserts which deterred massive settlement in those areas during the time when free movement in the region was possible, thereby keeping the populations very low.

Zimbabwe which is second after South Africa in GDP size, is number five in terms of GDP per capita. Its GDP per capita is US$622 per annum which is even below that of Swaziland, the fourth largest. Even though Swaziland is not well endowed with natural resources, it has a small population of 0.7 million people, the same size as the Gambia. Zimbabwe is a diversified economy, with strength in agriculture, manufacturing and mining sectors, and the GDP per capita as an aggregate indicator cannot reflect this. Lesotho and Malawi have almost equal GDP's per capita of US$204 and US$200, respectively. Tanzania follows with GDP per capita of US$108, while Mozambique is last at US$75.1 Mozambique, has been devastated by the civil war. It is one country with a very large potential for agriculture, given its fertile and underutilized land.

At the risk of using a simple definition of industrialization which concentrates only on the size of the manufacturing sector and industry, let us look at the relative sizes of industry, and manufacturing, in each of the countries. We are going to make a decision about the level a country's industrialization only on the basis of the following criteria.

Firstly, a country is deemed industrialized if at least 25 percent of its GDP comes from the industrial sector. In accordance with the ISIC classification industry has five divisions which are mining and quarrying (division 1); manufacturing (division 2 and 3); construction (division 4); and electricity, gas, water and sanitary services (division 5). Secondly, about 60 percent of industrial output should be produced by the manufacturing sector. Finally, at least 10 percent of the population should be employed in the industrial sector.

On the basis of this definition only two countries, South Africa and Zimbabwe are industrialized. In South Africa, industry contributes 52 percent to GDP while the manufacturing sector contributes 24 percent. Zimbabwe's industry accounts for 46 percent of GDP. However, its manufacturing sector contributes 30 percent to GDP while that of

South Africa is lower, at 24 percent. In both countries manufacturing is quite diversified. South Africa is a world leader in the technology of extracting fuel from coal, through its SASOL I, SASOL II and SASOL III projects. Zimbabwe acquired this technology from them, thus easing the oil shortage problem in the country.

In Zimbabwe agriculture is the largest single employer and the largest foreign exchange earner , while manufacturing earns less foreign exchange than agriculture. In South Africa agriculture contributes about 5.8 percent to GDP which is lower than that in Zimbabwe, where agriculture accounts for 11 percent of GDP. In Zambia the industrial sector is dominated by mining, where copper is the single largest product and earns nearly 90 percent of the country's foreign exchange. In Zambia agriculture contributes 11 percent to GDP. However, the country has been known to import food in drought periods, but this phenomenon could be eliminated by using better farming techniques.

In Tanzania and Malawi, where agriculture contributes 59 percent and 37 percent to GDP, respectively, this sector is more important, because industrial output is low in both countries. The same goes for Mozambique where agriculture contributes 35 percent to GDP, compared to the 12 percent contribution of industry. Botswana's industry has the largest share in GDP of 58 percent. Within that the manufacturing sector is quite small, accounting for only 6 percent of GDP. The implication is that mining dominates industrial output and indeed export earnings. Namibia also falls in this category with a large mining sector and a small manufacturing sector. The corollary is that even though manufacturing contributes a mere 5 percent to GDP, industry accounts for nearly one third (32 percent) of GDP in Namibia.

To measure the degree to which a country is monetized we shall use the ratio of money in circulation to the gross domestic product. We analyzed this ratio for 1988 in each of the countries except Angola. From the results in table 1 above, Mozambique has the highest degree of monetization, (37 percent) as measured by the money-GDP ratio. With an inflation level of 35.9 percent, it is not unreasonable to posit that the excess supply of money is causing most of that inflation. The reasoning follows from both the Fisherian and Cambridge versions of the quantity theory of money. Zambia too seems to have that problem, with a degree of monetization of 23 percent and the highest inflation in the region of 55.6 percent. However, South Africa has the same level of monetization as Zambia at 23 percent, but its level of inflation is four times smaller than that of Zambia. This is a clear case where money supply has been used as macroeconomic tool. South

Africa uses money supply (M3) targeting and interest rate targeting as a major tool for controlling inflation.

In the case of Tanzania and Malawi, with money-GDP ratios of 21 percent and 12 percent respectively, but close inflation levels of 31.2 percent for Tanzania, and 33.9 percent for Malawi, inflation cannot be solely attributed to monetary or demand pull factors. Cost-push inflation, especially imported inflation is a big contributor to the general level of inflation. Because of a shortage of vital imported inputs, there is a less than full employment equilibrium where the aggregate supply curve is in elastic. The result is a rapid rise in inflation with only minute increases in aggregate demand.

Zimbabwe's low monetization level of 16 percent is due to a monetary policy of keeping money supply growth low to avoid demand pull inflation. But the low inflation level of 7.4 percent in 1988 should not only be viewed as the success of restrictive monetary policy. Price control and subsidy policies have been utilized to keep inflation low. Botswana has the lowest money-GDP ratio of 8 percent and the second lowest inflation level of 8.4 percent, possibly signifying the effectiveness of monetary policy in keeping inflation down.

Only two countries in the region recorded Central Government budget surpluses in 1988. Botswana recorded the highest budget surplus of 15 percent of GDP, while Swaziland's budget surplus is a quarter of that, at 4 percent of GDP. Even with a budget surplus, Swaziland recorded a foreign debt worth 44 percent of GDP. Mozambique has the highest deficit in the region, mainly due to expenditure on defense for the civil war going on there. The case of Zambia is extreme because not only does it have a large budget deficit of 15 percent of GDP, but its foreign debt exceeds the gross domestic product by 35 percent, at 135 percent of GDP.

Malawi too seems to have both a budget deficit and a foreign debt strain, at least by the 1988 figures. With a budget deficit of 8 percent of GDP and a foreign debt worth 83 percent of GDP, the debt-service ratio is quite high. Zimbabwe's budget deficit is also high at 10 percent of GDP. This is attributed to the high recurrent expenditure on education and defense, where the latter may be contributing to some resource leakage. Zimbabwe has never defaulted on its foreign debt payments amounting to 28 percent of GDP and a debt-service ratio that is over 20 percent. The country is considering implementing a much needed structural adjustment program, one of whose aims is financial discipline on the part of Central Government. The program will run for five

years, from 1990 to 1995, and will require assistance with foreign funds, for its aggregate cost of Z$3-4 billion. Namibia with a foreign debt of 22 percent of GDP from the 1988 figures, needs financial discipline as well.

The South African case is quite interesting because its foreign debt is only 1.4 percent of GDP, but it has a large domestic debt. Even though it has been negotiating payment of its foreign debt since 1985 through the Interim I, II, and III arrangements, domestic debt will become a problem in future once the hardle of foreign debt has been cleared. Its foreign debt is about R 23 billion and it has already negotiated an Interim III arrangement for the period 1990 to 2000. During the period 1990 to 1993 it will pay back US$ 1.5 billion of its outstanding short term debt in eight installments and this amount is 20.5 percent of total short-term debt.

Tanzania seems to be the prudential case in the region, with the lowest budget deficit of 2 percent of GDP and the very low foreign debt of 0.1 percent of GDP, from the IFS 1988 figures. At least for this country's foreign debt will not be a future problem, unless the country engages in massive borrowing of short-term loans, in the next few years.

III. Trade issues in Southern Africa

1.Openness and current account

In this section we shall look at the trade statistics and traded commodities in Southern Africa. Table 2 shows the current account and degree of openness of each country.

The degree of openness of a country is defined as the sum of imports and exports as a percentage of the gross domestic product. That is,

$$(1) D = (E + M)/GDP,$$

where D = Degree of openness, E = Exports, M = Imports, and GDP = Gross Domestic Product. The "openness", essentially refers to openness to foreign trade, in the form of export to other nations and imports from other nations. Presumably, indices such as the Nominal Rate of Protection (NRP), Effective Rate of Protection (ERP), and Domestic Resource Cost (DRC), are much better measures of protection or openness to imports. But we require extensive and highly disaggregated data to be able to calculate these. Our degree of openness index still gives a rough indication on protection against imports and incentives for exports. The larger the index, the higher the degree of openness and the

opposite is true.

From Table 2, Lesotho has the highest degree of openness with an index of 1.55. This implies that the sum of exports and imports is 55 percent higher than GDP in that country. Swaziland also has a high degree of openness at 1.32, followed by Namibia at 1.13. These three countries belong to the South African Customs Union (SACU) and the Rand Monetary Area (RMA). That explains the high degree of openness since their main trading partner is South Africa. Lesotho has the highest current account deficit as a percentage of GDP in the region, with a figure of -18 percent. The implication is that the country is open to imports but less is exported, also putting pointers to inadequate exports incentives. On the other hand Swaziland has second largest current account surplus after Botswana, that is 17 percent of GDP. Swaziland is somewhat export oriented basically exploiting its available capacity in the tradable goods sector.

Being members of the Rand Monetary Area, Lesotho's, Maloti and Swaziland's Emalangeni, have a one-to-one exchange rate with the South African Rand, with the same exchange rate of 0.42057 against the U.S. dollar in 1988.

Among countries with a degree of openness index less than one, Botswana has the highest index of 0.97. Also, the country is doing well in the trade sector, with a current account surplus of 17 percent of GDP. Zambia has an openness index of 0.69, but posseses the second largest current account deficit of about 11 percent of GDP.

Zimbabwe, with a degree of openness of 0.58, exhibited almost balanced commodity trade in 1988, with a low current account surplus of 0.9 percent of GDP. At a superficial level, the country seems to be following good trade policies. But the current account surplus is a result of deliberate import control policies through import tariffs and foreign exchange allocation. These restrictions forced the trade account to balance with little left to market forces.

Tanzania, Malawi and South Africa have almost equal openness indices with exports and imports amounting to half of GDP. But both Malawi and Tanzania have current account deficits of 8 percent and 10 percent of GDP, respectively, while South Africa has a small current account surplus of 2 percent of GDP. May be the price export incentives offered by the low exchange rate in Tanzania are not enough to stimulate exports. It may be the case than there are few products to export and/or products with an available export market cannot be exported due to structural factors e.g. transport, and that information on export markets is not available to potential exporters. Therefore, devaluation without

structural incentives for exporters, will not be enough to stimulate exports in Tanzania.

2.Export diversification

For the promotion of future trade in Southern Africa, it is pertinent to assess the degree of export diversification among member countries. One index that measures export diversification is the Gini-Hirschman concentration index (GH). Regarding exports, the index is based on the ratio of the value of each exported commodity to total exports. If a country has diversified exports, the share of each exported commodity to total exports will be quite small.

Let x_i be the value of the exported ith commodity, and let x_e be the total calue of exports. Then the Gini-Hirschman (GH) concentration index is given by

$$(2) \qquad GH = \left(\sum_{i=1}^{n} (x_i/x_e)^2 \right)^{1/2}$$

where n is the number of commodities exported by the country. When there is export diversification, the index approaches zero as (x_i/x_e) gets smaller. When exports are concentrated on a few commodities, the value of x_i is almost as large as x_e, resulting in the index approaching a value of one. Then, the index is equal to or greater than zero, but can only be at most equal to one.

That is,

$$(3) \qquad 0 \leq GH \leq 1$$

It is notable that the export Gini-Hirschman concentration index essentially measures dispersion. It measures the degree of dispersion about a value of zero, which corresponds to total diversification, i.e. $(x_i/x_e) \to 0$. But a single value of the GH index does not tell us much. It is only useful if one compares GH values for different countries and/or the same country in different periods.

The Gini-Hirschman concentration indices for 1987 were calculated for each country in the Southern Africa region and the results are in Table 3. From Table 3 Zimbabwe is

the most diversified country in terms of exports. Zimbabwe's biggest export is tobacco and beverages which account for about 23 percent of total exports. Ferro-alloys also account close to 20 percent of exports. The rest of exports include, meat (3 percent), maize (4 percent), malted barley (0.3 percent), refined sugar (1 percent), crude materials except fuels (16 percent), chemicals (1 percent), manufactured material goods (5 percent), machinery, transport, radio/TV and electrical equipment (3 percent), and other miscellaneous products (0.3 percent).

The second most export diversified country is Tanzania, with most of its exports concentrated on the agricultural ash crops. In 1987 coffee accounted for the largest share of 32 percent in exports, and cotton, the second largest cash crop accounted for 20 percent of exports. Manufactured products contributed 19 percent to exports. Other exports include tea (5 percent), tobacco (3 percent), cashew nuts (4 percent), petroleum products (2 percent), minerals (6 percent), and other commodities (16 percent).

Mozambique comes after Tanzania with an export diversification index of 0.5255. In 1987 its main exports were lobsters (40 percent), shrimps (28 percent) and cashew nuts (18 percent). Other exports included, cotton fibre (5 percent), sugar (1.5 percent), tea (2 percent), wood (1.8 percent), coal (0.1 percent), citrus fruits (1.1 percent), cashew shell oil (1 percent), and copra (0.8 percent).

Malawi with a Gini-Hirschman concentration index of 0.6441 in 1987, mainly exported tobacco which accounted for 62 percent of exports that year. Sugar and tea each contributed to 10 percent to total exports. Other exports are ground meats (2 percent), cotton (0.1 percent), pulses (4.3 percent), coffee (3.4 percent) and other exports including rice at about 8 percent.

Zambia is the least diversified country in the region with a GH concentration index of 0.9325. Zambia's largest export is copper which invariably accounts for at least 92 percent of exports and earns more than 92 percent of foreign exchange for the country. Strong reliance on one mineral such as copper, has put them in deep jeopardy where, agriculture and manufacturing have been neglected. Export earnings and hence growth are strongly depended on the movement of copper prices in the international copper markets. Other exports are cobalt (9 percent), zinc (2 percent), lead (0.7 percent) and tobacco (0.3 percent).

The second least diversified country in exports is South Africa, with a GH concentration index of 0.8931. Gold bullion and gold coins, by far the largest exports,

accounted for about 74 percent of total exports in 1987. But the country does export manufactured goods amounting nearly 30 percent of total exports, the highest figure for manufactured exports in the region. That reflects on the relatively advanced manufacturing base in South Africa.

The country also exports food and livestock (8 percent), beverages and tobacco (0.2 percent), chemicals (5 percent), machinery and equipment (4 percent) and other miscellaneous commodities. The third least undiversified country is Botswana with an index of 0.8497. This country relies on diamonds which account for 85 percent of exports, followed by copper nickel matte (4 percent), textiles (2 percent), meat livestock (3 percent) and other commodities. Again we see the reliance on one primary commodity and a neglect of the manufacturing sector

IV. Trade Among Southern African Countries

1.Import-export matrix

This section will focus on commodity trade flows among countries in Southern Africa. While the Southern African Development and Coordination Conference (SADCC) countries have strived to cooperate in both development projects and trade, very little trade has been achieved. Trade among SADCC countries excluding South Africa and Namibia, is still below 5 percent of total foreign trade of the region. Table 4 and Table 5 reveal some trade statistics within SADCC countries.

Trade among the nine states belonging to SADCC has remained static and low for over 18 years, as shown in Table 4. Exports going to the SADCC region reached a peak of 4.6 percent in 1982 and the lowest level was 2.9 percent in 1979. Exports to SADCC have not risen above 4.5 percent of total foreign exports. The same picture is given by imports. Imports reached their highest level of 4.9 percent in 1970 and in 1979 reached their lowest ebb of 2.7 percent. Imports have not risen above 4.9 percent of all foreign imports. This is mainly attributable to the fact that the SADCC countries produce raw materials and therefore cannot export to each other.

The manufacturing industries also produce similar common goods such as textiles. It is precisely the lack of industrialization in manufacturing which keeps the demand for raw materials within SADCC low. Countries such as Botswana and Zambia that rely on single minerals, diamonds and copper, especially, will never find a growing market in SADCC, both in the short-run and long-run.

Zimbabwe has a dominant role among the SADCC countries. It controls 26.8 percent of SADCC imports and 54.8 percent of SADCC exports. From Table 5 above, Mozambique follows closely contributing 23.1 percent to SADCC imports, but has the lowest exports to the region after Lesotho. While Zimbabwe dominates exports, Botswana has a balanced picture, accounting for 20.9 percent of SADCC imports and 20.2 percent of SADCC exports. Zambia's picture is also less unbalanced than Zimbabwe's, as it accounts for 12 percent of SADCC imports and 10.8 percent of SADCC exports.

One question we may ask is how much trade flow among individual countries takes place and what commodities are traded. The best way of summarizing this information is an import-export table, based on the lines of an input-output table. Table 6 below is an import and export table showing trade flows among countries in 1988. The availability of data on trade flows between some countries has been disappointing, particularly for Angola. Data for South Africa and Namibia's trade flows with Botswana, Lesotho and Swaziland has been difficult to obtain.

In the intraregional trade, the most active trade link is that between South Africa and Zimbabwe. In 1988, Zimbabwe imported US$255.8 million worth of goods which accounted for 71 percent of its imports from the region. For South Africa this amounted to 40 percent of its regional exports. Regarding exports, Zimbabwe exported US$136.5 million worth of goods to South Africa, representing 37 percent of its regional exports but 77 percent of South Africa's regional imports.

Angola's export market in the region is Zimbabwe, which absorbs 68 percent of its exports. Although the figures on imports in Table 5 above indicate that Zimbabwe is the largest source of imports for Botswana, in the region, this is not accurate, because we do not have the trade figures with South Africa. Under the SACU arrangement Botswana imports nearly 80 percent of its goods from members of SACU, which implies that South Africa must be its main source of imports. The same argument goes for Lesotho which also has a common currency with South Africa, under the Rand Monetary Area arrangement.

Botswana's export market is the SACU member countries which absorb 9 percent of its total exports. Outside SACU Zimbabwe is Botswana's main market, Botswana exports animal and vegetable crude materials, clothing, animal oil and fats, and textiles. On the other hand Zimbabwe exports sugar, textiles, manufactures of metal, vegetables, cement, furniture, articles of rubber, and finished structural metal parts. Botswana also exports

meat and by-products, edible oils, hides and skins to Mozambique, Tanzania, and Zambia, and Lesotho. It also exports soda ash tallow and candles to Malawi, Zimbabwe, Zambia, and Swaziland.

Outside the South African market, Lesotho exports processed fruit and vegetables, garments, footwear, furniture, medicines, tallow and candles, ceramic ware and building materials, to Mozambique, Swaziland, Zambia, Zimbabwe, Botswana, Malawi, Tanzania, and Swaziland. It essentially exports to all the countries in Southern Africa, one or more of the commodities above. Swaziland another member of SACU, exports meat and by-products, sugar, edible oils, beverages, garments, furniture, wood and pulp, paper products, soda ash, tallow and candles, explosives, paint and varnish, trailers, to all SADCC countries including South Africa. At least one of these items is exported to each country.

Malawi's biggest trade partner for its source of imports is South Africa were worth US$107.3 million in 1988, representing 75 percent of the country's imports from the region. South Africa is also Malawi's largest export market in the region worth US$25.5 million in 1988 representing 45 percent of the country's export to the region. This dependence on South Africa has always existed and will become stronger when the situation in South Africa normalizes. Outside South Africa Malawi exports at least one of the following commodities in the region: processed fruit and vegetables, groundnuts, dried beans and peas, sugar, tea, tobacco and products, textiles and cotton, paper products, structural fabrication, and industry machinery, to all the SADCC countries.

Mozambique is dependent on South Africa and Zimbabwe for imports, and to the former for exports. In 1988 it imported US$97.8 million worth of goods representing 56 percent of its regional imports, while it exported goods worth US$6.7 million to South Africa. Mozambique's exports to the region include milk, fish, tea, garments, footwear, wood and by-products building materials.

Tanzania's biggest trading partners are Zambia and Zimbabwe, as far as imports are concerned. The country imported US$7.7 million and US$7.4 million worth of goods from Zambia and Zimbabwe, respectively, in 1988. The two countries supply 88 percent of Tanzania's imports in the region. However, its biggest export market happens to be Mozambique which imported US$3.5 million worth of imports from Tanzania, which represents 61 percent of Tanzania's region exports. Tanzania's exports to the region include meat and by-products, edible oils, coffee, sugar, spices, tea, honey, beverages,

tobacco, blankets, sisal products, garments, leather products, paper products, fertilizer, insecticides, soap and detergents, ceramic and glassware.

Zambia's trade relations in the region are strongest with South Africa and Zimbabwe. In 1988, 72 percent of Zambia's imports in the region worth US$186.4 million, came from South Africa, while it exported 38 percent of its products to Zimbabwe and only 17 percent to South Africa. Like all the countries in the region Zambia's exports are still in the form of primary products or raw materials. Its exports which cover all countries in the region include, ground nuts, sugar, tobacco, textiles, wood and by-products, lime, glass products, cement, copper and products, lead, zinc and aluminum utensils.

We have already alluded to the fact that Zimbabwe is one of the dominant countries in the region. Its trade with Botswana resulted in US$73.8 million worth of imports, amounting to 21 percent of regional imports, making it the second supplier of imports to Zimbabwe. Zimbabwe's exports to the region includes edible oils, coffee, sugar, garments, hides and skins, footwear, chemicals, cement, steel ingots and bars, copper and products, lead, zinc, industrial machinery and earth moving equipment.

The main hinderance to increasing trade in the region is the production of similar raw materials by member countries. Trade in agriculture can only experience sudden demand shocks if one country is experiencing drought conditions otherwise demand will always be low.

V. Trade in labor

Not only do countries in Southern Africa have commodity trade with South Africa, but also trade in factors of production. In 1986 there were 378,125 workers in South Africa from the neighboring countries, where remittances accounted for a considerable part of some countries' capital account inflows. The actual figure for migrant workers in South Africa is higher than that given in official statistics because workers are dispersed in various sectors, some workers are employed seasonally while some are illegally employed. Table 7 shows the number and percentage of migrant workers in South Africa from neighboring countries. Most migrant workers from other countries are employed in the mining sector which in 1986 employed 83 percent of the foreign workers. Agriculture employed 3.7 percent. The other sectors' employment in 1986 were the following:

manufacturing (2.4 percent), construction (2.4 percent), commerce (1.2 percent), domestic services (3.1 percent), and government and other services (3.3 percent).

Before we analyze the origin of foreign workers let us take a look at the remittances and deferred payments of foreign workers to their countries of origin. Table 8 shows their remittances and deferred payments from 1980 to 1985.

By far the largest supplier of foreign workers in South Africa is Lesotho. From Table 7, Lesotho supplied 138 193 workers in 1986, amounting to 36.5 percent of all foreign workers. It should be noted that this share increased from 36.7 percent in 1975 to 49.9 percent in 1982, and thereafter has continued to decline. The sharpest drop was from 1982 to 1983, where the share dropped by 9.2 percent. Even in terms of number of workers, Lesotho labor force in South Africa has generally been declining since 1975. From Table 8 we can see that remittances and deferred payments have been rising even though the number of people employed has been falling. In 1980 remittances amounted to R 153.3 million, and in 1983 they increased to R 280.6 million and increased further to R 401.2 million in 1985.

Remittances by migrant workers increased from 38.7 percent of GDP in 1978 to 52.4 percent of GDP by 1982. If remittances amount to half of a country's GDP then, the magnitude of dependence is quite alarming. Every year out of 30,000 people who enter employment, nearly 4,000 of them, that is 13.3 percent seek employment in South Africa as migrant workers. Nearly, 75 percent of the Lesotho workers are employed in Welkom Goldfields which is on one-and-a-half hour by bus from the Lesotho border. Nearly 70,000 of them commute home for weekends.

Mozambique is the second largest supplier having supplied 73,186 workers in 1986, worth 19.4 percent of all foreign workers that year. From 1960 to 1974, Mozambique used to be the largest supplier of foreign workers, accounting for about 25 percent of the total mine labor force in South Africa. In some of the years during this period they exceeded 100,000, but Mozambican workers have also faced the severest drop from 150,738 workers in 1975 to only 73,186 in 1986. The sharpest drop in the 1975-86 period was in the five years from 1975 to 1980 where the drop was from 150,738 in 1975 to 60,490 in 1980. The substantial drop is attributed to Mozambique's independence from Portugal in 1974.

One could imagine the unemployment impact of this decline back home in Mozambique. But may be the civil war absorbed most of the workers into the army, but then what will happen when the civil war ends. Even with this decline in employment

levels the value of remittances of migrant laborers to Mozambique increased from R 66.6 million in 1980 to R 189.5 million in 1985. This merely reflects the increase in the average wages of South African workers, at least in nominal terms.

Malawi's contribution to the foreign labor force in South Africa is the third largest, having accounted for 31,411 workers in 1986 or 8.3 percent of all foreign workers. Its share has been declining steadily from 10.8 percent in 1980 to 8.3 percent in 1986. Remittances contribute about 2.5 percent of GDP and the number employed in South Africa is nearly 7 percent of Malawi's total formal sector employment. In 1975 Malawi had 39,308 workers employed in South Africa and the number declined to 31,411 in 1986. The decline is explained by the fact Malawi needs more workers for its plantations and peasant farms.

In 1974 Malawian workers died in an air crash on their way home, and the Government used this accident as a reason for withdrawing workers from South Africa. But the main reason was labor shortage at home and the air crash was just a trigger for the withdrawal decision. Recruitment still exists, as Table 7 shows an increase from 30,144 workers in 1985 to 31,411 in 1986. The Malawian Government benefits from remittances which increased from R 30.7 million in 1980 to R 77.8 million in 1985.

Botswana supplied 28,244 workers to South Africa making up 7.5 percent of foreign labor force in 1986. This is a drop from the 10 percent contribution of 1980. In 1986 the Botswana labor force in South Africa was equivalent to 5 percent of the economically active population of Botswana. Remittances of workers have been increasing from R 32 million in 1980 to R 47.6 million in 1983 and R 76.2 million in 1985.

Swaziland's contribution to the South Africa labor increased from 11,981 in 1980 to 21,914 in 1986, 82.9 percent increase. Even in percentage terms, Swaziland's share increased from 4.1 percent in 1980 to 5.8 percent in 1986. This amounts to 17.7 percent of Swazi workers in formal employment. The increase in migrant workers has come as a partial relief to Swaziland whose economy has been slowing down in growth. Remittances by Swazi migrant workers was R 61.3 million in 1985, accounting for 3.5 percent of GDP.

Since independence in 1980, Zimbabwe's workers in South Africa has dropped from 20,540 in 1980 to 7,304 in 1985, a fall from 7 percent to 1.9 percent, respectively. Zimbabwe is the only country showing a fall in remittances from R 15.4 million in 1980 to R 13.6 million in 1985. On the other hand, Zambia has fewer workers, merely 2,421 in 1986, with remittances worth R 1.5 million. Angola has virtually no labor force in South

Africa, with only 22 workers in 1986, a phenomenal drop from 623 workers in 1975. The remittances are quite small, only R 0.1 million for each of the three years 1980, 1983, and 1985.

The future of the migrant workers in South Africa is uncertain. Unemployment is increasing in South Africa, and after the situation normalizes, wages may go up making it attractive for the self-employed to enter the formal employment, even in the mines. Besides, there could be new laws that favor the employment of South Africans to other nationals.

What would this mean for the foreign workers and their countries? Firstly, the foreign workers would lose their jobs and new labor would not be recruited. This would threaten the income security of the workers and their families. Secondly, unemployment in the neighboring states would grow, especially in Mozambique, Lesotho, and Swaziland, and Botswana which are heavily depend on South African employment. The respective governments would be faced with the ubiquitous unemployment problem, which is politically risky. Thirdly, income remittances from the foreign workers, that support the capital account and GNP would be threatened as workers are retrenched. Countries such as Lesotho whose GNP is immensely supported by remittances would face serious problems, with declining domestic productivity. Finally, the number of people below the poverty datum line would increase, and rural income would generally fall as remittances dwindle.

If the neighboring countries do not solve their current unemployment problem urgently it will get worse when their citizens are retrenched from South Africa. Mozambique has a double edged problem because it also has some of its citizens working in East Germany. Their workers will be some of the first to lose their jobs as Germany unification takes effect. Mozambique had 12,095 workers in East Germany, and these will return to swell the unemployment level.

VI. Transport and communication[2]

[2] The main source of information in this section is Hanlon, J (1989), "SADCC in the 1990s", Economist Intelligence Unit, London, and readers should refer to Hanlon (1989) for a detailed analysis of the issues.

In the early part of this century goods from land-locked countries, then Nyasaland and Northern and Southern Rhodesia which are now Malawi, Zambia, and Zimbabwe, respectively, were exported mainly through Mozambique and Angola. After the independence of Mozambique and the declaration of UDI in Zimbabwe, more goods passed through South African ports. In fact, South African ports became a focal point for most of the trade for all the land-locked countries in Southern Africa.

1.Rail transport

The railway system in Southern Africa ramifies through the 11 countries under study. The 1,067 mm (3 ft 6 in) British gauge, spans a length 40,000 km: 22,600 km in South Africa (including Namibia), 12,500 km in SADCC and 5,000 km in Zaire. The rest of Tanzania's railway line, outside the Tazara line linking Zambia and Tanzania, is the 1 m gauge based on the German and French systems. This part is not considered to be part of the SADCC railway system.

Below, is Table 9 showing the railway distances to major ports within SADCC and South Africa. What is not included in the picture are the ports of Walvis Bay and Luderitz in Namibia, which have the convenience of being close, for countries such as Botswana. In the SADCC region, about 64 percent of all SADCC projects were in transport and communication, which amounted to $4.8 billion.

Trade through the Mozambique ports of Beira, Maputo, and Nacala has been declining since 1981. In land traffic in 1981 was 5.9 million tons, 2.9 million tons in 1984, 3.0 million tons in 1986, and 2.8 million tons in 1987. The decline in traffic is attributable to security problems in Mozambique. In 1987 Zambia stopped exporting its copper through South Africa, and most of it now goes through Dar es Salaam and some through Beira.

The Beira corridor has been Zimbabwe's preoccupation for sea transport since independence. Beira is also the nearest port to Harare. This rail corridor has been defended by Zimbabwe's army since November 1982, probably costing about Z$100 million a year. At the beginning of 1986 the Beira corridor was made a priority project by SADCC and given a 10-year development plan. It has received funding from Austria, Sweden, Norway, and U.S.A. At the beginning of 1989, it was to receive $676 million in projects, $444 million was under negotiation, and the rest will be received later during the 10-year plan period. Of the 22 donors involved, Italy had the highest donation of

$86 million, mainly for railway facilities. The Economic Community and Netherlands, giving $59 million and $33 million, respectively, are financing the rehabilitation of ports. Nordic countries are donating $122 million for container and oil terminals, while the World Bank will give $48 million for projects and Japan $20 million for additional locomotives.

Local cargo and oil through the Zimbabwe pipeline rose from 1.4 million tons in 1986, and to 2.3 million tons in 1988. Rail traffic rose from less than 400,000 tons in 1986 to 650,000 tons in 1988. During the same period containers handled rose from 5,000 to 15,000. Basically, imports via Beira rose by 39 percent in 1988. In 1988 Zambia sent 106,000 tons of copper through Beira, while Zimbabwe's Minerals Marketing Corporation (MMCZ) sent 55,000 tons of asbestos, steel, mineral alloys, graphite, and copper, through the Beira port.

The Beira Corridor Group (BCG) of Zimbabwe, which is a consortium set up by 270 Zimbabwean companies to promote the corridor in 1986, has been the flagship in the development of access to the Beira port. Each company contributed $2,500 to BCG and it works along with the Mozambique company Austral to locate opportunities for investment in the corridor. The line to Nacala port is also quite as developed as the Beira corridor. France, Canada, Portugal, the EC, and Finland have offered to donate the entire $261 million needed for the corridor. Work on the railway line is progressing well.

The Tazara line was built by the Chinese in 1975 and links Zambia to the port of Dar-es-Salaam. Table 10 shows traffic through Tazara railway line. The peak year for the Tazara line to Dar-es-Salaam was in 1978, and 1981 was its worst year, and by 1987 it had improved and this trend may be maintained until 1995. Although the port of Dar-es-Salaam still needs more attention to boost is physical capacity, pledges have been made to boost the capacity of the whole corridor. It is to receive $41 million from U.S.A. for 17 locomotives, and $30 million for other projects. The World Bank, ADB, Sweden, and Denmark have also pledged donations. Sweden will spend $17 million buying 350 wagons from Zimbabwe.

The Malawi northern corridor is also under construction and is expected to be ready by the end of 1991. This corridor will link Malawi to Tazara and then to Dar-es-Salaam, and is expected to send 150,000 tons a year, through Dar-es-Salaam. But Malawi still sends most of its goods through South Africa, and in 1987 it sent and received 636,000 tons through South Africa, 63,000 tons through Beira, 400,000 tons through the Northern

corridor (Dar-es-Salaam), and 11,000 tons through Nacala.

The Limpopo-Maputo corridor is also expected to be an asset. The National Railways of Zimbabwe is doing most of the reconstruction of the Limpopo railway line to Maputo, and Botswana will provide $3 million worth of concrete sleepers for 100 km of track. Mozambique Railways (CFM) has rehabilitated 40 km of the rail nearest Maputo. It is expected that in 1989 the line should have carried about 360,000 tons in both directions on completion of the first phase. The line will carry about 840,000 tons a year, and the projection is 1.4 million tons by the year 2000. Maputo will also be linked to Swaziland if donor funds are available. Such a link will involve about $42 million worth of investment.

The Benguela railway line is also on the SADCC agenda. This line links Lobito port of Zaire to Zambia. In January 1989, $580 million was requested from donors. Already $90 million of the $96 million required for the first phase has been pledged by the Economic Community, Nordic countries, Brazil, World Bank, and the Africa Development Bank, and others. It is expected that the capacity of the line would be about 900,000 tons a year after the 5 years of the second phase, which brings it to its 1960's capacity.

South Africa's railway system is controlled by the South African Railways and Harbours Administration, an organization of the Department of Transport. The system covers the whole country and is well linked to the seaports of Port Elizabeth, Capetown, East London, Durban, Richards Bay, and Saldanha Bay. By the end of 1978 South Africa's railway system totaled 22,644 km of 1,067 meter gauge, and 705 km of the 0.610 meter gauge for its minor branches. Currently the South African railway system is linked to the rail systems of Zaire, Zambia, Mozambique and there is potential to link it to the Tazara line to Dar-es-Salaam and Benguela Rail in Angola.

2.Air transport

The South African Airways has a developed Southern African network and has the greatest diversity in the region. Its internal network is well developed as well. The key airports in South Africa are Johannesburg, Capetown, Durban, Port Elizabeth, East London, and Windhoek. In 1980 all airports handled 151,834 tons of air cargo, with Johannesburg accounting for 104,796 tons within that cargo.

Due to recently completed extensions on airports in Dar-es-Salaam, Gaborone, Lilongwe, Maseru, and Manzini, all SADCC countries can now handle long haul aircraft.

Table 11 gives a breakdown of passengers per week within the SADCC region. It is clear that there is more air traffic between SADDC and South Africa (5110) than there is among SADDC countries (2,335). Trips to Southern Africa account for 68.6 percent of the trips and 33.3 percent of passengers within the region are carried by South African carriers. Ties with the South African transport system reflect the extent of economic ties that exist, or even the cultural ties. Within the other countries belonging to SADCC ties have failed to deepen. Each country has its own airline and will not allow another airline to crowd it on traditional routes. Flying an airline degenerates to national pride as opposed to an economic transport requirement. Most airlines within the SADCC region make losses, and calls for a "SADCC airline" have been made, but we are certain they will be ignored.

3.Telecommunications

The importance of telecommunication for economic cooperation among countries is of vital importance. Why should a businessman in Harare (Zimbabwe) find it easier to telephone London than Lusaka (Zambia)? This reflects on the need for better links within Southern Africa in the field of telecommunication. What is encouraging is that all nine SADCC countries now have earth stations.

Microwave links exist between Zimbabwe and Zambia, Zimbabwe and Botswana, Tanzania, and Malawi, also between Zambia, Mozambique, and Malawi. International exchanges exist in Zambia, Botswana, and Zimbabwe. The growth of telecommunication within SADCC was about 22 percent per year, between 1981 and 1987, and international traffic growth was about 10 percent during the same period. During 1981-1987 period SADCC air traffic with South Africa grew only 2 percent annually. During this period there was a dramatic increase of 67 percent per annum between Zimbabwe and Tanzania, and 32 percent per annum between Zimbabwe and Zambia, while that between Zimbabwe and South Africa dropped by 2 percent per annum.

But the growth figures pertaining to South African links underestimate the degree of linkage. In 1980/81 the total paid minutes for telecommunication was 1,801,000 for the intra-SADCC region, and 5,951,000 in 1986/87, but the traffic from SADCC to South Africa was about 9 times bigger at 14,741,000 in 1980/81 and 16,709,000 in 1986/87. Even though the rate of growth indicates slower growth of telecommunication with South Africa, but the volume of traffic is quite large. Telecommunication in 1987/87 between

South Africa and SADCC accounted for 42 percent of all international traffic in Southern Africa.

Like most projects in the region, telecommunication projects were and are still financed through donor funds. For the 34 projects in the sector, $330 million of the proposed $689 million has been raised, for the 10-year plan set out. The biggest donors are Italy ($76 million), Japan ($66 million), and Sweden ($18 million), and the Africa Development Bank ($48 million). The funds will be used for the establishment of new earth stations and/or exchanges in Angola, Mozambique, Swaziland, and Tanzania. This will enable countries to digitalize their systems and line up with Intelsat VII, by 1991.

4.Future policies for transport and telecommunication

The development of transport and telecommunication in Southern Africa has relied on foreign aid and donations. The big question is whether this aid continue to flow in the future and what are the repayment costs involved Generally, donors are beginning to reconsider the objectives of giving aid money where returns are low or nonexistent. There is some competition for the world pool of funds by East European countries. This implies that future aid for developing countries may decline and Governments with the assistance of the private sector in these countries will have to finance these projects. The Governments may have to borrow from organizations such as the World Bank and the African Development Bank, and domestic development banks. Inter-Inter-governmental aid is likely to dwindle.

Besides, if the political situation in South Africa improves, some of the SADCC projects may suffer adversely. The Beira corridor, for instance, might experience a fall in cargo handled at the port of Beira. It would be more costly to have the bulk of trade for both Zimbabwe and Zambia, transported through the Beira corridor. Zambia may return to its earlier route of transporting its copper exports through South African ports. Zimbabwe will also reduce its traffic on the Beira corridor, and switch the bulk of it to South African ports. But the BCG has argued that in August 1988 it cost $400 less to import a 20 ft container via Beira than via South Africa.

But the maintenance costs of the corridor will prove to be high for both the Mozambican and SADCC governments. With South African ports, other countries will not have to worry about maintenance costs, the Government there has the capacity to take care of it. Besides, the port of Beira is congested and this will not improve until 1991, because

work is running more than a year behind schedule. This is a good case for Zimbabwe for switching exports of such minerals as asbestos, steel, mineral alloys, graphite, and copper to South African ports.

That part of the Beira corridor which connects Beira to the North of Mozambique (to Moatize coal mine) and Malawi, was initially funded by East Germany. Now with a United Germany, will this commitment be honored? We should be allowed to speculate that this assistance will cease and with the security situation in Mozambique not improving, the line may never be rehabilitated to full capacity even in the far future.

The Tazara route to Dar-es-Salaam has been hit by management problems and underpowered locomotives. These problems have plagued the line at least for the last ten years. In Tanzania and Zambia there is no civil war, such as in Mozambique which has paralized the transport system. The line has operated under peaceful conditions but it still needs attention. It is unprofitable for instance for Zimbabwe to transport its coal through Tazara for export through Dar-es-Salaam. Average transport costs and mining costs outweigh the average price per ton of Zimbabwean coal.

On the other hand, the South African Railways is subsidized and is more efficient. With the situation normalizing there, some of the traffic from Zambia may go through South Africa. Besides the South African transport services will continue to cut the rates for ports handling of cargo more aggressively, to maintain and indeed increase its share of regional transport system. Unless SADCC countries reduce their tariff charges competition with South African railways will be stiff.

Regarding air transport, national airlines will continue to operate even though they make losses. That is an issue of national pride. But air traffic with South Africa will increase when the situation normalizes. But I would be persuaded to think that the South African airlines and South Africa private air companies will monopolize the SADCC-South African air traffic because businessman from that country are likely to increase their activities in the region.

We mentioned earlier that telecommunication between SADCC countries with South Africa grew at only 2 percent per year and in fact with Zimbabwe it has been falling by 2 percent per year. In a post-apartheid South Africa, there will be an increase in telecommunication activity with Zimbabwe due to business ties with South Africa which have existed since the birth of the two countries. But the digitalization of telecommunication in SADCC must be encouraged to improve communication with the

rest of the world, and the link to the Intelsat VI in 1991 should be seen to happen and looked forward to.

Basically, intra-SADCC transport system might be weakened in a post-apartheid South Africa. Trade routes will be diverted to South Africa. But in the long run even the South African ports, and rail and road systems, will also be congested. May be we may see some traffic being channeled back through the SADCC ports of Beira, Dar-es-Salaam, Nacala, Benguela, Maputo. But initially the shift will be to South African ports, then a slower shift back may be witnessed in the long run. The shift back to SADCC ports will depend on how much exports/imports from these countries will increase and congest the South African ports.

VII. Energy

1.Current energy situation

South Africa produces more than 60 percent of the electricity generated on the entire continent of Africa, and it is also the largest and the world technological leader in coal-based energy production. The Electricity Supply Commission (ESCOM), founded in 1922, supplies more than 93 percent of electricity in South Africa. A national transmission grid system supplies users with electricity through over 116,000 km of overheard powerlines, and over 7,700 km of underground cables. At least 25 power stations supply the system and over 85 percent of power supplied by ESCOM is from coal-fired stations. About 10 percent of the electricity is imported from Cahora Bassa hydro power station in Mozambique, while about 2 percent is from local hydro and gas-turbine stations. Mozambique benefits in foreign currency earnings from the sale of hydroelectricity to South Africa. Electricity accounts for 20 percent of South Africa total energy usage and the demand is expected to increase to more than 34,000 million in 1990 and 72,000 million in the year 2000.

In 1950 the SASOL Ltd project was established to manufacture petroleum products from coal. It is now the world leader in the gasification and liquefaction of coal. Due to the oil crisis in 1973, the Sasol II plant was created in 1974, and Sasol III was to start production in 1982. When all three plants are fully in operation they will consume 32 million tons of coal per year. South Africa, has through the Southern Oil Exploration

Company (Soekor), intensified the search for oil and gas in the country and gas findings off the southern coast have prompted drilling.

One interesting energy feature is the presence of Uranium, for nuclear power. ESCOM is administering the distribution of electricity from a nuclear power station. The station, comprising two pressurized water nuclear reactors of 922 mw, started operation in 1982 and 1983. Uranium enrichment also exists for supplying the nuclear station. Nuclear power is viable in South Africa since the country holds the second largest reserves of uranium in the Western World and is also the second largest supplier.

Let us now look at the SADCC energy situation. Regional cooperation within the SADCC region has been in some cases been superseded by national interest goals for self-sufficiency. In this respect, Zimbabwe's position regarding the coal-fired Hwange electrical power station comes under scrutiny. This plant, built at a cost of $1 billion with some finance from the World Bank, has not only swelled Zimbabwe's debt, but also jeopardized electrical energy imports from Zambia and Mozambique. Zimbabwe, through a deal in November 1987 with Zambia, now imports about 250 MW of electricity from that country, which is half of what it used to buy and even below the UDI level. The Hwange plant has led to an increase in electricity tariffs for local consumers, that are quite substantial for people who also had to pay tax surcharges for its building costs.

But progress has been made and is under way in some spheres but only on a small scale. Kazungula in Western Zimbabwe and Kasane in Northern Botswana were linked to the Zambia grid in 1987 at a cost of $2 million given by the Finish and Canadian Governments. For the funds provided by Norway, Malawi would link with Mozambique where power from the Malawi grid would service Northern Mozambique. Other crossborder links between Mozambique and Swaziland, and Zambia, Malawi and Tanzania, are being considered.

Zimbabwe is also connected to Mozambique systems mainly through Mutane to the Chicamba-Mauazi system and Beira for emergency uses. A line linking Zimbabwe directly to the Cahora Bassa, in which Zimbabwe would purchase 660 MW is under consideration. This line is estimated to be $300 cheaper than building another coal fired power plant in the coal town of Hwange.

Botswana is building a 100 MW link in order to purchase cheap hydroelectric power from Zambia and the project is expected to be completed by the end of 1990. The power will be brought through the Zimbabwe grid under an agreement. Botswana already has a

coal fired Morupule power station. It would be less economic to expand it to obtain the 100 MW than it would be to it import from Zambia. Mozambique is considering a hydropower project in Corumana and Lesotho is also constructing a hydropower station. The money for these projects has been pledged by Norway ($11 million) for Lesotho, and Sweden and Norway ($11 million) for Mozambique. Lesotho is considering the US$55 million Oxbow hydroelectric project with the aim of reducing its dependence on South Africa.

Oil, another source of energy is the largest single import in the SADCC region with the exception of Angola which produces its own oil. Most refineries in SADCC member states are uneconomic to run. The countries are better importing refined products than engaging in uneconomic refining of crude oil. Angola is the exception in this case, because its oil production and refinery is efficient and the country is an exporter of oil.

In Zimbabwe, Lonrho and the National Oil Company of Zimbabwe (NOCZIM) are extending the Beira-pipeline to Harare, at a cost of $42 million, through their joint venture company Petrozim. The pipeline will also service Botswana and Malawi. The pipeline linking Ndola in Zambia and Dar-es-Salaam is being rehabilitated as well.

2.Future energy policies

South Africa derives more than 85 percent of its electrical power supply from coal fired power stations. Three issues pertaining to this type of power generation can be addressed for shaping future energy policies. Firstly, coal is an exhaustible and nonrecyclable resource. Even though for South Africa coal is basically its "black gold" with such vast deposits, the resource is still depletable. In the long run it will not be feasible to supply electricity from dwindling coal reserves. The country will have to import the coal, from neighboring countries such as Zimbabwe which also has substantial reserves.

Secondly, the negative environmental externalities, caused by the burning of coal should not be underestimated. We have already been alerted to the dangers of pollution destroying the ozone layer and causing global warming. This is a subject that has found its way into international forums and theaters and the need to reduce such pollution is ever increasing. Coal fired power stations are environmentally hazardous and should be gradually reduced. This is an approach that uses one type of environmentally hazardous

energy (coal) to produce a nonhazardous energy (electricity). The costs of producing this energy are measured using private marginal cost and average cost, rather than a higher marginal social cost and average social cost.

Finally, the tariff structure of the chemically/mechanically produced electricity is unfavorable to consumers. The power is more expensive than hydroelectric power which uses natural potential energy from falling water to turn turbines.

Regarding nuclear power which South Africa has recently brought into use, that again is a hazardous technology. This is not only a technology intensive approach, but the dangers of a nuclear accident are always lingering. It has been quite characteristic for technical experts to leave an African country once it acquires independence, and this does not exclude nuclear scientists. Therefore, the possibility of a shortage of nuclear experts after the independence of South Africa, threatens the viability of nuclear power as a viable future energy source.

In a post-independence South Africa, we would be persuaded to think that it should reconsider its energy policies. Given some of the problems above, more hydroelectric power should be imported from Cahora Bassa and the hydropower station currently being built in Lesotho, for instance. The country already imports 10 percent of its electricity from Cahora Bassa and should consider increasing this share. This would not only boost Mozambique's exports but provide South African consumers with cheaper and safe electricity.

The same goes for Zimbabwe which has developed the coal-fired Hwange station. Coal is an exhaustible resource, it is environmentally hazardous, and the whole chemical/mechanical process has raised electricity tariffs for consumers and the national debt. An economic alternative is to import cheap electricity from Cahosa Bassa in Mozambique and indeed from Zambia. All this would foster more regional cooperation in Southern Africa in the energy sector.

VIII. Policies for improving regional trade relations

Impediments to regional trade have been the cause of low intraregional trade in Southern Africa amounting to just under 5 percent of all total trade from the region. Trade with the rest of the world has flourished and will continue to do so unless bold steps are taken to improve regional trade for complementing trade with the rest of the world. In

this section we shall address policy issues for reducing some obstacles to regional trade which we believe are within the capacity of the countries to do so.

Impediments to regional trade can be divided into four groups each with several categories. In essence the groups are:

- size of the regional market and need for a Southern Africa Common Market Area (SACMA);
- economic policies;
- administrative policies;
- policies for combating natural trade barriers.

We shall look at each type of policies in turn.

1.Southern Africa Common Market Area (SACMA)

The population of the SADCC countries, which excludes South Africa and Namibia is nearly 65 million people, with an aggregate GDP worth only 25 percent of that of South Africa and Namibia. The small market is quite restrictive in terms of absorbing regional trade. After the situation has normalized in South Africa, SADCC members have to think seriously about the relevance of the organization. SADCC which was founded in 1980, had and still has the objective of reducing dependence on South Africa and increasing collective self-reliance. With a normalized situation in South Africa, SADCC based on the current structure and objectives would be irrelevant.

We would posit that when that time comes a new regional organization in Southern Africa, which in this discussion we refer to as the Southern Africa Common Market Area (SACMA), should be considered. SACMA would have to include South Africa and Namibia and all SADCC countries. The inclusion of South Africa would increase the regional population to about 100 million people, with a GDP of not less than US$90,000 million and GDP per capita not less than US$900 per annum.

Benefits from SACMA would be to minimize the duplication of products, reduce wasteful competition, create cheaper and more efficient transport system, enhance a greater division of labor, enhance collective self-reliance and above all increase the regional market. These are general perceived advantages of regional cooperation and integration which can only be achieved and realized through a committed pursuit of the objectives, by the participating countries.

The world seems to be moving closer to creating trading blocs. The European Economic Community will finally merge into one integrated regional economy in 1992. This may mean nonmembers of the community will find it increasingly difficult to export to that market. United States is also moving closer to forming a trading bloc with Latin America and Canada, which would result in another closed market in the Western Hemisphere. The Asian market under Japanese leadership and domination is also yet another trading bloc. Then where does that leave Africa? This is all the more reason why trade organizations in different regions of Africa are necessary. The trade organizations should also interact with each other in the spirit of larger African market.

In the SACMA region trade tariffs would have to be substantially reduced or removed, such liberalization would only cover SACMA goods in the hope of increasing trade. SACMA members would also be prohibited from entering into trade arrangements with nonmembers in a way that jeopardizes SACMA regional trade, unless permission is granted by SACMA.

Within SACMA, South Africa would play a dominant role being the most advanced country in the region. Within this framework, nationalistic and inward oriented policies would hinder the persuance of total integration. It is such behavior that has plagued and indeed destroyed regional trade arrangements all over the world and thus should be kept to the unavoidable minimum.

2.Economic policies

a.Production of similar commodities

What is striking but presumably expected, is the production and export of similar products by Southern African countries. Countries produce the same agricultural goods such as tobacco, tea, coffee, beef, and in manufacturing, textile products are ubiquitous. And yet the largest import into all the countries is machinery and equipment, which is imported from the developed world.

Domestic policies should be geared towards giving incentives for diversification, especially in manufacturing. Also, a problem of absence of uniform regional standards exists. There are no clear uniform standards for goods produced for the region. Such specification of standards would have to be worked out, among member countries,

presumably by setting up a SACMA Bureau of Standards, to track down sub-standard tradable goods.

b.Policies for developing supporting facilities

(1)Information gathering

Of paramount importance in market oriented trading is the availability and access to information for both importers and exporters in the region. There is no available central information center and besides the costs of gathering such information may be prohibitive. In some cases information pertaining to available markets is not accessible or simply does not exist.

To the extent that private companies and their governments would benefit from some information arrangements, they should aggressively support a central pool of information. Here we have in mind the Trade Fairs organized by the International Trade Centre (ITC). Governments and the private sector should take an active role in financing and exhibiting in ITC trade fairs and domestic trade fairs to improve market understanding, business contacts, and information exchange.

(2)Trade financing and insurance policies

One factor that has hindered trade in the region is the lack of adequate credit facilities to pay for the goods and insure then while in transit. When the Letter of Credit (LOC) is not adequately covered by some financial institutions the trade deal is reduced to imprompt cash payments by importers. The corollary is a fall in the volume of trade as both importers and exporters are equally frustrated.

Banks would have to be encouraged to take more risk in covering LOC. Insurance companies as well should be less risk averse in giving insurance cover for traded goods in the region. Banks tend to avoid risk rather than manage risk. As markets become more active and competitive, banks would have to learn and be willing to manage more risk rather than to avoid it. To ensure that trade credit facilities exist, countries should consider setting up Trade Banks whose sole purpose is to finance and insure trade among countries in the region in the same way as in South Korea and Japan, the success stories.

(3)Infrastructure development policies

Policies for developing infrastructure for transport, communication and energy resources have been discussed above. At the risk of repeting the discussion above, seaports should be improved and be much more efficiently utilized. Railway charges for transporting goods between countries would have to be reviewed with the intention of lowering them. High tariffs may prohibit a rather lucrative trade flow among countries and efforts have to be made to reduce them. Communication facilities should be developed further. Already a microwave link already exists within Southern Africa. This should only be the beginning of the development of a sophisticated communication system in the region for facilitating not only trade relations but to satisfy basic human consumer needs.

3.Stimulating private entrepreneurship

The presence and promotion of a large public sector in some countries has crowded out the development of private entrepreneurship. The absence of competition to sharpen the state monopoly companies has allowed them to degenerate and maintain unprofitable operations. Subsidies have been poured into the ailing parastatals not only to keep them on the break even line, but also in the name of providing cheap basic goods and services to the poor. Even the poor would not afford to live with companies that fuel the budget deficit and hence swell the foreign and domestic debt of the central government. This infringes on intergenerational equity as future generations, including children of the poor, would have to pay more taxes to cover the debts.

Under conditions of inadequate communication, private enterprise in Southern Africa finds it difficult to instill confidence in fellow businessman. Communication and the ability to pursue contacts and enquiries, and honor contracts has hampered the development of entrepreneurship.

The current flexibility being shown towards privatization of parastatals has not gone far enough. Privatization should be an objective of governments where possible, in order to stimulate profitable trade links in the region.

4.Macroeconomic policies

There has never been any more need for better and sound macroeconomic policies in Southern Africa than in the eighties. The search for such policies in the coming ninetees should also be geared towards the regional market. For instance, should monetary and currency union, exchange rate rationalization, trade tariffs rationalization, and interest rate parity, be the flagship policies of the Southern Africa Common Market?

To avoid the settlement of regional trade in hard currency, monetary union should be one objective of SACMA. Monetary union would aim at establishing some common currency which we shall refer to here as the SACMA dollar. Each country in the region could be allowed to use their individual currencies, but the exchange rate against the SACMA dollar for each currency would have to be determined on the regional basis. One way of determining the exchange rate is to weight it by the amount of trade the particular country has in the region or peg it on the SDR, which is also a weighted exchange rate.

To allow some flexibility within the exchange rate system each currency would have an exchange rate band within which it is allowed to fluctuate against the SACMA dollar. This would be some form of exchange rate targeting. Of course, the easiest approach is to have exchange rate parity among the currencies, where the exchange rate is unity. This is the case in the Rand Monetary Area (RMA) which currently covers South Africa, Lesotho, Swaziland, and Namibia.

Also management of money supply, interest rates and inflation would have to be rationalized. Monetary policy would have to be managed in such a way that it poses no excessive inflation pressures and keeps interest rates volatility at its minimum. The ideal case is to align the supply of money and inflation levels in accordance with the purchasing power parity (PPP) law. But this is only the ideal case, not easily achievable in the real situations. But the idea would be to keep inflation differentials, at the prevailing exchange rates, at their unavoidable minimum.

The rationalization of interest rates should accompany the overall monetary policy. Again, the ideal situation is one of interest rate parity that would rid the region of any excessive movement of capital to one particular country with high interest rates. But this again is not easy to achieve in reality. SACMA countries would have to minimize real interest rate differentials in order to stop excessive movement of capital to only those countries that maintain above average interest rates and below average rates of inflation.

Equally pertinent, is the management of fiscal policy. Tight budgetary expenditure by governments would be ideal to keep demand pull inflation down and money supply within the targeted levels. Government budget deficits in Southern Africa have been fueled by recurrent expenditure while capital investment has remained quite low. The aim would be to reduce the recurrent expenditure component of the budget, and allow capital investment to increase.

It cannot be overemphasized that trade tariffs would have to be reduced to allow freer movement of goods and services across countries. Import barriers in the form of high import duties impede and prevent region trade. In some countries high import tariffs have been imposed with the argument of protecting an "infant industry" even when such an industry does not exist. Invariably, revenue from tariffs are merely used for financing recurrent expenditure in the budget deficit. For some goods bought from the region, tariffs would have to be removed completely to promote mutually beneficial trade relations.

5.Regional stock exchanges and capital markets

A stock exchange is the centrepiece of capital markets in an economy, enabling private investors to buy and sell their shares held in companies. In the Southern African region the Johannesburg Stock Exchange (JSE) in South Africa is the largest and the oldest, followed by the Zimbabwe Stock Exchange. Botswana's Stock Exchange has just been established about a year ago, in 1989.

We have heard arguments for a joint SADCC stock market to attract private investment in the region. A regional stock exchange would have its advantages in the sense that it would be a big market that attracts big capital. But this would also be its disadvantage, because small companies that may wish to raise capital may fail to qualify as members of a big regional stock exchange. We would argue, therefore, for each country to have its own stock exchange. To encourage private investment in the region, we would want to see joint listings of companies in regional stock exchanges. This would encourage cross-border investment.

The role of the stock exchanges would be to facilitate the privatization process and to raise capital in both rights issues and new floatations. New issues should be encouraged to allow new investors rather than the popular rights issues which allow the already-owners

of shares to buy more shares. The stock exchange would also be utilized for disciplining inefficient companies, through the share price quotation process. One use of the stock exchange is for promoting the process of "natural selection" of the most efficient companies through mergers and takeovers.

Needless to say that with joint listings of companies across countries would have to be accompanied by less controls on capital movements. Botswana is the only country in the region with virtually free exchange and capital movements. To instill confidence in cross-border investors, capital controls within the region should be minimized.

While we argue for the establishment of stock exchanges in the region, we have to bear in mind South Korea, which developed with a small stock market. But the stock market is one way of attracting private investment which is desperately needed in Southern Africa.

Banking activity is showing signs of expansion. Zimbank, one of the five commercial banks in Zimbabwe, has openned a branch in Botswana. South African banks which are already in Namibia may expand to Zimbabwe and Botswana. This opens doors for more flow of capital at the intra-bank level. It is one way for liberalizing capital flows within the region. The banking sector would also face more competition and would offer better banking services and be more willing to manage risk rather than avoid it, which is currently the case.

6.Removing administrative barriers

Administrative barriers to trade in the region may be technical and/or political. Technical administrative barriers refer to the complex rules and regulations traders have to go through just to enact a single transaction. Political administrative controls are based on the need to preserve national identity and protecting what is domestic, essentially a fear of domination by other nations.

a.Technical rules and regulations

Import licensing regulations impede the flow of intra-regional trade. Initially, an importer has to apply for the foreign exchange which has to be approved by the Central Bank, and the approval is not immediate but takes weeks and may be months. Once the foreign exchange has been approved then one can purchase the commodity. Once the

commodity has been transferred to the customs department in the importer's country, he has to apply for an import license to allow the goods into the country and pay customs duty on them as well. The import licensing process is tedious and often so inefficient that it even erodes the productive efficiency of enterprises by slowing down the availability of imported vital raw materials.

What has also hampered intra-regional trade is complex regulations, especially those pertaining to the amount of local content in the exported goods. The regulations, which are meant to promote regionally produced goods, have good intentions, but the bureaucratic procedures involved in determining the amount of local content are tedious. While the regulations do prevent re-exports of imported commodities, bureaucratic inefficiencies reduce the volume of trade.

To increase the flow of trade in the region, import licensing activities, especially on machinery and equipment, should be reduced. Also demands on the level of local content in exported commodities should be more flexible, allowing for lower levels of local content.

b.Political controls

Political controls are a result and an accompaniment of inward-oriented nationalistic policies, driven by fears of domination by foreigners. This highlights a competitive rather than a cooperative spirit in regional integration. Countries compete to be the largest exporters in the region while cutting down on regional imports by branding them inferior to their own or openly suggesting that there is nothing to import from their neighbors.

The law of comparative and competitive advantage should take precedence over political and economically inferior inward-oriented policies.

7.Reducing effects of natural trade barriers

Natural barriers to intraregional trade includes population size, geographic location, and market size as measured by incomes per capita. The population is also part of the market size.

In Southern Africa the population is only about 100 million people, only equaling that of Nigeria. Countries such as Swaziland, Botswana, Lesotho, and Namibia, have small

populations that reduce the size of the domestic market. Some countries such as Namibia and Botswana, have large deserts, the Namib desert in the case of Namibia and Kalahari desert in the case of Botswana. Lesotho is quite mountainous and environmental degradation has resulted from that. As a result of the deserts and mountains, some sections of these countries are uninhabited and uninhabitable, the corollary being low population densities per square km.

Low incomes per capita add to small markets in Southern Africa. Mozambique and Tanzania have GDPs per capita that are below US$120 per annum, while Malawi and Lesotho have GDPs per capita that are above US$200 and yet still below US$220 per annum.

Six countries in Southern Africa, namely Botswana, Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe are landlocked. They have no direct access to the sea and seaports. This only leaves South Africa, Namibia, Angola, Mozambique, and Tanzania as the countries with seaports. Lesotho's case is the most peculiar because it is completely surrounded by South Africa, making its position in the current circumstances rather difficult.

As we have alluded to earlier, one way of increasing access to seaports in future would be to use the South African ports which handle more cargo, once the situation in that country normalizes. The Mozambican ports of Maputo, Beira, and Nacala, and the Dar-es-Salaam port in Tanzania, need further rehabilitation to handle more cargo for the land-locked countries. More on this has already been discussed under the section on transport and communication.

V. Conclusion

Intra-regional trade in Southern Africa is small, amounting to just below 5 percent of all external trade in the region. One major impediment to regional trade is that the countries are all nearly at the same stage of development, essentially producing similar mining and agricultural commodities, and other raw materials. Trade is therefore difficult if there is no heterogeneity of commodities.

Import tariffs and administrative licensing procedures impede the flow of intra-regional trade. Besides, even when demand for imports exists information about it is not available to traders in those markets. One other factor is the lack of trust and fear of

domination by other countries that have higher incomes per capital and generally better economies.

The issue of migrant laborers in South Africa may cause problems in the future when that country normalizes. South Africans will claim their jobs and foreigners will naturally lose them. Back home, governments will be faced with mounting unemployment problems.

Energy sources in the region need better conceptualizing. Electricity should be sourced where it is cheap, such as in Cahora Bassa in Mozambique and Zambia. Coal driven thermal power electricity such as that produced in South Africa is not only expensive but has the negative environmental costs of pollution.

Investment on transport routes should be increased. Railways and ports need further revamping and transport tariffs should be more competitive.

When the situation in South Africa normalizes, countries in Southern Africa should come together under a Southern Africa Common Market Area (SACMA), that may include monetary and exchange rate union. This regional organization would give the region more access to seaports in South Africa, more intra-regional trade and better regional energy policies and communication. The South African Customs Union (SACU), Rand Monetary Area (RMA), Southern Africa Development and Coordination Conference (SADCC), Preferential Trade Area (PTA), may have to give way to a bigger regional trade organization which includes South Africa and Namibia. The new preferential trade organization would have to work with other African trade organizations towards creating an Africa-wide preferential trade area.

Table 1. Southern African Economies. Main Economic Variables.

Country	GDP Level (US$ million) 1988	GDP Growth rates 1965-80	GDP Growth rates 1980-88	Population in millions	GDP per capita	Shares in GDP (%) Agric.	Shares in GDP (%) Ind.	Shares in GDP (%) Manuf.	Area (000 Km²)	Degree of monetization (M/GDP) (1988)	Inflation CPI (1988)	Budget surplus or deficit as % of GDP (1988)	Foreign debt as % of GDP (1988)
Angola	...	...	...	...	...	...	...	...	...	...	...	...	...
Botswana	2,577	14.3	11.7	1.2	2,147.5	4	58	6	600	0.08	8.4	+15.0	16.0
Lesotho	408	6.6	...	2	204	21	27	13	30	0.23	...	...	...
Malawi	1,401	0.1	2.0	7	200.1	37	18	12	119	0.12	33.9	-8.0	8.3
Mozambique	1,052	...	...	14	75.1	35	12	...	802	0.37	35.9	-23.5	...
Swaziland	582	...	...	0.7	831.4	...	...	...	...	0.10	14.7	+4.0	44.0
Tanzania	2,492	3.7	...	2.3	108.3	59	10	6	945	0.21	31.2	-2.0	0.1
Zambia	2,735	1.8	...	7	390.7	11	48	20	753	0.23	55.6	-13.0	135.0
Zimbabwe	5,598	4.4	4.8	9.0	622.0	11	46	30	391	0.16	7.4	10.0	28.0
South Africa	74,136	...	3.4	33	2,246.2	5.8	52	24	1,229	0.23	12.8	-5.0	1.4
Namibia	1,554	3.0	1.0	1.3	1,195.4	12	32	5	823	0.23	12.8	-1.5	22.0
Total for Southern Africa	92,535	...	...	98.2	942.3	...	...	...	5,692	...	...	...	...

Source: International Financial Statistics (IFS) 1989, IMF, and countries' statistical bulletins.

Table 2. Southern Africa: Openness and Current Account, 1988

	Degree of Openness (1988)	Current account as percentage of GDP (1988)
Angola	...	...
Botswana	0.97	+17.0
Lesotho	1.51	-18.0
Malawi	0.51	-8.0
Mozambique	...	...
Swaziland	1.32	+12.0
Tanzania	0.50	-10.0
Zambia	0.69	-11.0
Zimbabwe	0.58	+0.9
South Africa	0.51	+2.0
Namibia	1.13	+5.0 1/

Source: International Financial Statistics (IFS).

1/ Estimate.

Table 3. Southern Africa: Gini-Hirschman Concentration Index, 1987

Country	GH Index
Angola	...
Botswana	0.8497
Lesotho	...
Malawi	0.6441
Mozambique	0.5255
Swaziland	...
Tanzania	0.4292
Zimbabwe	0.3626
Zambia	0.9325
South Africa and Namibia	0.8931

Table 4. Southern African Development and Coordination Conference (SADCC): Regional Trade, 1970-87

	1970	1979	1982	1984	1987
Percentage of SADCC exports to					
SADCC countries	4.5	2.8	4.6	4.3	4.3
rest of the world	95.5	97.2	95.4	95.7	95.7
Percentage of SADCC imports from					
SADCC countries	5.4	2.6	3.9	4.2	4.6
rest of the world	94.6	97.4	96.1	95.8	95.8
Percentage of total trade					
within SADCC	4.9	2.7	4.2	4.2	4.4
with rest of the world	95.1	97.3	95.8	95.8	95.6

Source: Hanlon, J. (1980), SADCC in the 1990s, EIU, London, p.60.

Table 5. Southern Africa: Trade by Country, 1987

Country	Percent of imports	percent of exports
Angola	2.2	...
Botswana	20.9	20.2
Lesotho	1.1	0.1
Malawi	8.5	3.6
Mozambique	23.1	1.4
Swaziland	0.8	7.8
Tanzania	4.6	2.1
Zambia	12.0	10.8
Zimbabwe	26.8	54.0
Total	100	100

Source: Hanlon, J. 1989. SADCC in the 1990s, EIU, London, p.60.

Table 6. Southern Africa: Import-Export Matrix, 1988

Exports (US$ million) / Imports (US$ million)	Angola	Botswana	Lesotho	Malawi	Mozambique	Swaziland	Tanzania	Zambia	Zimbabwe	South Africa and Namibia	To Southern Africa	To Africa	Total exports
Angola	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	...	...
Botswana	... ...	... ...	... ...	1.6 (1.0) (2.0)	0.2 (0.1) (0.3)	... ...	0.1 (0.6) (0.1)	2.3 (0.9) (3.0)	73.8 (21.0) (95.0)	... ...	78.0(100.0)	9.0	1,418.0
Lesotho	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	0.1 (0.03) (100.0)	... ...	0.1(100.0)	...	125.1
Malawi	... ...	3.5 (4.0) (6.0)	... ...	... ...	13.7 (8.0) (25.0)	... ...	0.7 (4.0) (1.0)	8.7 (3.0) (16.0)	3.7 (1.0) (7.0)	25.5 (14.0) (46.0)	55.9(100.0)	...	289
Mozambique	1.0 (13.0) (10.0)	... ...	... ...	0.6 (0.4) (6.0)	... ...	... ...	1.1 (6.0) (10.0)	... ...	0.9 (0.2) (8.0)	6.7 (4.0) (66.0)	10.2(100.0)	16.6	103,014.0
Swaziland	... ...	... ...	... ...	... ...	... ...	... ...	0.3 (2.0) (2.0)	8.3 (3.0) (56.0)	6.2 (2.0) (42.0)	... ...	14.8(100.0)	...	311.0
Tanzania	... ...	0.1 (0.1) (2.0)	... ...	0.3 (0.2) (5.0)	3.5 (2.0) (61.0)	... ...	... ...	1.3 (0.5) (22.0)	0.6 (0.2) (10.0)	... ...	5.8(100.0)	6.0	279.0
Zambia	1.4 (18.0) (3.0)	3.0 (4.0) (7.0)	2.2 (37.0) (5.0)	5.5 (4.0) (12.0)	0.2 (0.09) (0.3)	... ..	7.7 (45.0) (17.0)	... ...	17.1 (5.0) (38.0)	7.6 (4.0) (17.0)	44.7(100.0)	5.8	873.0
Zimbabwe	5.2 (68.0) (1.0)	74.5 (92.0) (20.0)	3.7 (63.0) (1.0)	28.7 (20.0) (8.0)	58.1 (33.0) (16.0)	2.6 (10.0) (0.1)	7.4 (43.0) (2.0)	52.1 (20.0) (11.0)	... ...	136.5 (77.0) (37.0)	368.8(100.0)	27.3	1,2427.0
South Africa and Namibia	... ...	... ...	... ...	107.3 (75.0) (17.0)	97.8 (56.0) (15.0)	... ...	... ...	186.4 (72.0) (29.0)	255.8 (71.0) (40.0)	... ...	647.3(100.0)	4.5	21,549.0
Total from Southern Africa	7.6 (100.0)	81.12 (100.0)	5.9 (100.0)	143.0 (100.0)	173.4 (100.0)	2.6 (100.0)	17.3 (100.0)	259.1 (100.0)	358.2	176.3	1,275.5		
Total percentage from Africa	...	87.3	...	20.9	...	...	8.4	34.0	35.8	2.0			
Total imports	...	1,031	61.2	466.0	262.8	277.0 1/	843.0	816.0	1,209.0	18,757.0			26,374.1 23,620.0

Source: International Financial Statistics, December 1989, IMF, Washington; and estimates.

Notes: Figures in parenthesis of one percentages. Figures in parenthesis on the right of the value figure is the percentage of imports from that particular country, while the figure below is the percentage of exports to a particular country.

1/ Estimates.

Table 7. Southern Africa: Migrant Workers in South Africa, 1975-86

Country of origin	1975		1981		1983		1984		1985		1986	
Angola	623	(0.2%)	69	(0.02%)	68	(0.02%)	48	(0.01%)	44	(0.01%)	22	(0.006%)
Botswana	37,016	(8.9%)	29.169	(0.7%)	25,963	(7.39%)	26,433	(7.5%)	27,814	(7.5%)	28,244	(7.5%)
Lesotho	152,188	(36.7)	150,422	(49.8%)	145,797	(40.7%)	138,433	(39.4%)	139,827	(37.7%)	138,193	(36.5%)
Malawi	39,308	(9.5%)	30,602	(10.1%)	29,162	(8.3%)	29,268	(8.3%)	30,144	(8.1%)	31,411	(8.3%)
Mozambique	150,738	(36.3%)	59,391	(18.7%)	61,218	(17.4%)	60,407	(17.2%)	68,665	(18.5%)	73,186	(19.4%)
Swaziland	16,390	(4.1%)	13,418	(4.4%)	16,773	(4.7%)	16,823	(4.8%)	22,255	(6.0%)	21,914	(5.8%)
Zambia	914	(0.2%)	727	(0.2%)	743	(0.2%)	1,274	(0.4%)	833	(0.2%)	2,421	(0.6%)
Zimbabwe	8,897	(2.1%)	16,965	(5.6%)	7,742	(2.2%)	7,492	(2.1%)	7,428	(2.0%)	7,304	(1.9)
Other	8,512	(2.0%)	995	(0.5%)	70,105	(19.5%)	71,072	(20.3%)	73,998	(2.0%)	75,430	(20%)
Total	414,586	(100.0%)	301,758	(100.0%)	358.021	(100.0%)	351,260	(100.0%)	371,008	(100.0%)	378,125	(100.0%)

Note: Figures in parenthesis are percentages of total.

Source: Leistner, E. and Esterhuysen, P. (1988), South Africa in Southern Africa, Africa Institute, pp.123 and 124.

Table 8. Southern Africa: Remittances and Deferred Payments, 1980-85

(In millions of rand)

Country of origin	1980	1983	1985
Angola	0.1	0.1	0.1
Botswana	32.0	47.6	76.2
Lesotho	153.3	280.6	401.2
Malawi	30.7	51.3	77.3
Mozambique	66.6	116.8	189.5
Swaziland	13.2	32.1	61.3
Zambia	0.6	1.0	1.5
Zimbabwe	15.4	8.7	13.6
Other	3.5	139.6	220.5
Total	315.4	677.8	1,041.7

Source: Leistner, E. and Esterhuysen, P. (1988). South Africa in Southern Africa, Africa Institute, p.126.

Table 9. Southern Africa: Railway Distances to Major Ports in SADCC and South Africa

(In kilometers)

	SADCC					South Africa	
	Dar es Salam	Beira	Maputo	Lobito	Nacala	Durban	East London
Zambia							
Lusaka	2,045	2,026	2,035	2,679	--	2,812	3,116
Ndola	1,993	2,344	2,353	2,361	--	3,130	3,434
Zimbabwe							
Harare	--	698	1,178	--	--	2,077	2,404
Bulawayo	--	1,181	1,061	--	--	1,859	1,921
Botswana							
Francistown	--	1,377	1,257	--	--	1,663	1,725
Gaborone	--	1,813	1,693	--	--	1,409	1,289
Malawi							
Blantyre	--	567	--	--	840	3,342	3,669
South Africa							
Johannesburg	--	--	636	--	--	777	1,016

Source: J. Hanlon, SADCC: Progress, Projects and Prospects, EIU, 1984, p.25.

Table 10. Southern Africa: Goods Traffic on the Tazara Line, 1978-88

(In millions of tons)

Year	Overseas	Local	Total
1987	1,021	252	1,273
1981	547	205	752
1986	627	364	891
1987	875	347	1,221
1988	--	--	1,100
1995 1/	1,300	700	2,000

Source: Hanlon, J. (September 1989), SADCC in the 1990s, EIU, London, p.81.

1/ Estimates.

Table 11. Southern Africa: Key Air Routes, 1987

(Passengers per week)

Route	SADCC Carriers	SA Carriers	Total Passengers
SADCC to SADCC			
Harare-Lilongwe	670	--	670
Harare-Lacanda	430	--	430
Harare-Gaborone	160	--	160
Harare-Maputo	140	--	140
Harare-Manzini	120	--	120
Luanda-Lusaka	100	--	100
Lilongwe-Dar-es-Salaam	100	--	100
Lilongwe-Dar-es-Salaam	100	--	100
Other	615	--	615
Total	2,335	--	2,335
SADCC to South Africa			
Harare-Johannesburg	890	700	1,590
Gaborone-Johannesburg	360	330	690
Lilongwe-Johannesburg	225	400	625
Luanda-Johannesburg	360	360	560
Manzini-Johannesburg	160	200	520
Maputo-Johannesburg	250	--	450
Maseru-Johannesburg	385	150	385
Manzini-Durban	--	140	150
Harare-Durban	--	2,480	140
Total SADCC-South Africa	2,630	2,480	5,110
Total regional weekly trips	4,965	2,480	7,445

Source: Hanlon, J. SADCC in the 1990's, EIU, September 1989, London.

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